

Remarks

Claims 1-10 and 12-19 are pending in the Application. Claims 1, 4, 10 and 13 have been amended herein. Claim 3 and 12 have been canceled herein. In view of the following remarks, reconsideration and withdrawal of the rejections is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 1-10 and 12-19 stand as rejected under 35 U.S.C. §103(a) as being unpatentable over Uptegraph (U.S. Patent No. 5,673,850) in view of Hyltin et al. (U.S. Patent No. 4,264,034) or Truong et al. (U.S. Patent No. 5,943,917).

Uptegraph discloses a programmable thermostat that includes a programming device for generating programs and a temperature comparison device to operate a temperature-modifying device, such as a furnace or air-conditioning system (See the Abstract). The Office Action acknowledges that Uptegraph discloses a rotatable controller and does not disclose a linearly movable member. Thus, the rejection relies on either Hyltin or Truong to cure the deficiencies of Uptegraph as well as Levine (U.S. Patent No. 4,751,961) and Truong as evidence that linearly and rotatable thermostat controllers are equivalent.

Hyltin discloses an energy conserving thermostatic control system having digitally implemented control functions for use with a heating and/or air conditioning system (See the Abstract). More specifically, Hyltin discloses the use of a complex arrangement of a plurality of switches and sliding members for determining the thermostat's set points with respect to setting the clock, operating the thermostat, and switching there between. However, Hyltin teaches away from the subject matter Claims 1-2, 4-10 and 13-19 because of its disclosure of this complex array of switches and sliding members as well as its disclosures that:

[a]nother object of the invention is to provide such a digital thermostatic control which includes an array of slide switches having contacts which are multiplexed with existing conductors for inputting and indicating time and temperature set point data. (See Column 3, lines 59-63).

Thus, Hyltin does not teach or suggest that a single switch would allow for setting a plurality of programs. This array or “impressive group” of switches leaves a user prone to programming mistakes because it is cumbersome to program and complicated to use thereby leading to inefficient use of a heating/cooling apparatus (Def. of “array”, see Webster’s II New Riverside Dictionary, Revised Edition, Houghton Mifflin, NY 1996). Even if Uptegraph was combined with Hyltin, the resulting thermostat would possess an array of switches and would not result in the subject matter of Claims 1-2, 4-10 and 13-19. In addition, Hyltin does not teach or suggest a substantially linearly moveable member with separate positions for setting a plurality of programs that also has a distinct position for running a temperature-modifying device.

In sharp contrast to Hyltin, Claims 1-2, 4-10 and 13-19 recite a single substantially linearly moveable member with separate positions for setting a plurality of programs within the programmable controller such as, for example, a weekday program, a weekend program, and a daily program. Thus, one skilled in the art would not find any teaching, suggestion or motivation to combine Uptegraph with Hyltin to result in the subject matter of Claims 1-2, 4-10 and 13-19. Therefore, the Applicant respectfully requests that the rejection be withdrawn.

Truong discloses a thermostat employing a lever for selecting the temperature setting that has a detent mechanism for creating individual detent positions associated with temperature setting values. Truong is designed to be simple to accommodate persons with visual impairments, and therefore incorporates a detent mechanism thereby making it possible to set the thermostat by feel alone (See Column 1 lines 28-53; Figures 1 and 2). As a result, Truong

teaches away from Claims 1-2, 4-10 and 13-19 since it provides no motivation or suggestion that a person having impaired vision would, by feel alone, navigate a thermostat having a single substantially linearly moveable member with separate positions for setting a plurality of programs that also has a distinct position for running a temperature-modifying device. Truong also discloses a thermostat where one lever performs one function or task. Even if Uptegraph was combined with Truong, the resulting thermostat would possess several levers where each would only perform a single function.

In sharp contrast to Truong, the subject matter of Claims 1-2, 4-10 and 13-19 is a single substantially linearly moveable member with separate positions so that it may perform several functions (e.g. setting a plurality of programs and also having a distinct position for running a temperature-modifying device). Thus, one skilled in the art would not find any teaching, suggestion or motivation to combine Uptegraph with Truong to result in the subject matter of Claims 1-2, 4-10 and 13-19, and therefore, the Applicants respectfully request that the rejection be withdrawn.

With respect to Truong serving as evidence that linear and rotatable thermostat controllers are equivalent, the Office Action does not provide those portions of Truong supporting such a statement and the Applicants respectfully request such support be provided. Furthermore, Truong does not equate the two types of thermostat controllers, but instead indicates that two classes of thermostats exist, namely, those that are round and have temperature setting knobs and those that are lever-controlled and usually rectangular. While Truong discloses that one shape may be preferred for no other reason than personal choice, there is utterly no suggestion or disclosure equating linear and rotatable thermostat controllers.

With respect to Levine serving as evidence that linear and rotatable thermostat controllers are equivalent, the Office Action does not provide those portions of Levine supporting such a statement and the Applicants respectfully request such support be provided. Levine discloses an electronic programmable thermostat, based on a microprocessor, which emulates the basic control function of conventional round thermostats by allowing the desired temperature to be adjusted by rotation of a member supported on the thermostat (See Column 2, lines 1-11). Levine discloses the use of switches 34 and 36 and slide switch 58 for performing basic functions such, for example, switching between heating and cooling functions (See Column 5, lines 6-13 and Column 6, lines 24-37), as well as thumb switches 56 for a set-back setting (See Column 6, line 43 through Column 7, line 5). However, there is utterly no disclosure or suggestion in Levine that linear and rotatable thermostat controllers are equivalent.

In light of the foregoing, the Applicants respectfully submit that the Application is in condition for allowance, which action is respectfully requested. The Examiner is invited to contact the Applicant's representative at the telephone number below to resolve any remaining issues.

Respectfully submitted,



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